a) contacting a 9q PCIP polypeptide, or a cell expressing the 9q PCIP polypeptide with a test compound; and

b) determining whether said 9q PCIP polypeptide binds to said test compound, thereby identifying a compound suitable for treating a cardiovascular disorder.

2. **(Amended)** The method of claim 1, wherein the binding of said test compound to said 9q PCIP polypeptide, is detected by a method selected from the group consisting of:

a) detection of binding by direct detection of test compound/polypeptide binding;

b) detection of binding using a competition binding assay; and

c) detection of binding using an assay for PCIP activity.

3. **(Amended)** A method for identifying a compound suitable for treating a cardiovascular disorder, comprising:

a) incubating a cell expressing i) a potassium channel comprising a Kv4.3 or Kv4.2 subunit, or a fragment of a potassium channel comprising a Kv4.3 or Kv4.2 subunit, and ii) a 9q PCIP polypeptide, in the presence and absence of a candidate compound; and

b) determining whether the presence of the candidate compound modulates the interaction of the potassium channel or fragment thereof with said 9q PCIP polypeptide, thereby identifying a compound suitable for treating a cardiovascular disorder.

11. **(Amended)** The method of any one of claims 1, 3, 17 or 19 wherein said cardiovascular disorder is associated with an abnormal I_{to} current.

12. **(Amended)** The method of any one of claims 1, 3, 17 or 19, wherein said 9q PCIP is human 9q.

15. **(Amended)** The method of any one of claims 1, 3, 17 or 19, wherein said cardiovascular disorder is long-QT syndrome.

16. **(Amended)** The method of any one of claims 1, 3, 17 or 19, wherein said cardiovascular disorder is congestive heart failure.

Please add new claims 17-23 as follows:

17. A method for identifying a compound suitable for treating a cardiovascular

disorder comprising:

a) contacting a biologically active fragment of a 9q PCIP polypeptide, or a cell expressing a biologically active fragment of said 9q PCIP polypeptide with a test compound; and

b) determining whether said biologically active fragment binds to said test compound, thereby identifying a compound suitable for treating a cardiovascular disorder.

18. The method of claim 17, wherein the binding of said test compound to said biologically active fragment of a 9q PCIP polypeptide, is detected by a method selected from the group consisting of:

a) detection of binding by direct detection of test compound/biologically active fragment binding;

b) detection of binding using a competition binding assay; and

c) detection of binding using an assay for PCIP activity.

19. A method for identifying a compound suitable for treating a cardiovascular disorder, comprising:

a) incubating a cell expressing i) a potassium channel comprising a Kv4.3 or Kv4.2 subunit, or a fragment of a potassium channel comprising a Kv4.3 or Kv4.2 subunit, and ii) a biologically active fragment of a 9q PCIP polypeptide, in the presence and absence of a candidate compound; and

b) determining whether the presence of the candidate compound modulates the interaction of the potassium channel or fragment thereof with said biologically active fragment of a 9q PCIP polypeptide, thereby identifying a compound suitable for treating a cardiovascular disorder.

20. The method of any one of claims 17, 18, or 19, wherein said biologically active fragment of a 9q PCIP polypeptide comprises an EF domain.

21. The method of any one of claims 17, 18, or 19, wherein said biologically active fragment of a 9q PCIP polypeptide comprises amino acid residues 68-252 of human 9q.

22. The method of any one of claims 17, 18, or 19, wherein said biologically active fragment of a 9q PCIP polypeptide comprises a calcium binding domain.

23. The method of any one of claims 17, 18, or 19, wherein said biologically active fragment of a 9q PCIP polypeptide comprises a Kv4.3 or Kv4.2 potassium channel α subunit binding domain.

REMARKS

Claims 1-16 were pending in the application. Claims 4-10, 13 and 14 have been cancelled without prejudice as being directed to a non-elected invention. Claims 1-3, 11-12, and 15-16 have been amended and new claims 17-23 have been added. Accordingly, after the amendments herein have been entered, claims 1-3, 11-12, and 15-23 will be pending. For the Examiner's convenience all of the pending claims are set forth in Appendix A.

Attached hereto is a marked-up version of the changes made to the claims by the current amendments. The attached page is captioned "**Version With Markings to Show Changes Made.**"

Support for the claim amendments and new claims can be found throughout the specification and claims as originally filed. In particular, support for claims 17-19 can be found at, for example, page 18, lines 35-37, or page 17, lines 36-37 of the specification. Support for claim 20 can be found at, for example, page 50, lines 14-29 of the specification. Support for claim 21 can be found in Example 10, specifically at page 49, line 33 through page 50, line 2 of the specification (this section of the specification discloses the generation of an N-terminal truncation mutant of human 9q PCIP (KchIPΔ2-67), in which the polypeptide was reduced to the C-terminal core sequence (residues 68-252)).

No new matter has been added. Any amendments to the claims should in no way be construed as an acquiescence to any of the Examiner's rejections and were done solely to expedite the prosecution of the application. Applicants reserve the right to pursue the claims as originally filed in this or a separate application(s).

Objection to the Claims

The Examiner has objected to claims 1-3, 11-12 and 15-16 because "they are drawn to non-elected subject matter by incorporating methods using PCIPs other than 9q."